



**CITY OF BURLINGTON  
DEPARTMENT OF PUBLIC WORKS**

645 Pine Street, Suite A  
Post Office Box 849  
Burlington, VT 05402-0849  
802.863.9094 VOX  
802.863.0466 FAX  
802.863.0450 TTY  
[www.dpw.ci.burlington.vt.us](http://www.dpw.ci.burlington.vt.us)

**Steven Goodkind, P.E.**  
DIRECTOR OF PUBLIC WORKS

*Carol Weston, P.E.*  
Project Engineer

MEMO

TO: Finance Board

FROM: Carol Weston, Capital Program Manager

DATE: February 9, 2011

RE: Police Department Capital Improvements

The Police Department, located at 1 North Avenue is serviced by 8 mechanical units which are currently being replaced on a rotational basis. Two units have been replaced in each of the last two fiscal years. The Capital Improvement Program has identified the next phase of this rotation in the FY 2011 CIP. The CIP has \$65,000 in this year's budget for mechanical systems upgrades to 1 North Avenue.

Climate Systems has performed the install of the last two rounds of replacements as well as maintenance on existing units. Because of their familiarity with the units, we feel that it is appropriate for them to install the system. In addition, it is appropriate for the Police Department to have a maintenance contract in place for the service of their mechanical systems. Once the install of these new units is completed, we will solicit proposals from local vendors for a service contract.

Climate Systems has provided pricing for the units controlling the Administrative area and Holding Areas as well as a system modification which allows for the separation of the gym/fitness HVAC from the adjacent office areas. The cost for the work is as follows (quote attached):

- 1) AC unit for Fitness Room with controls: \$6720
- 2) Holding Area Heating Unit Replacement \$9850
- 3) Admin Area Heating Unit Replacement \$14,900

Total Mechanical Upgrade Cost \$31,470

While the mechanical work is being done, it is a prudent and opportune time to replace the hot water heater with a new unit that has the proper mixing valves and is up to code as well. We requested a quote from Climate Systems to do this work and have verified that it is a good price giving the materials and labor needed to bring it up to code. The cost for the Hot Water Heater is \$9700. The quote is attached.

The generator which services the Police Department provides emergency power for the City's Emergency Operations Center and Police/Fire Dispatch as well as the rest of the building. This unit was purchased in 2005 with a grant from Homeland Security. It is much larger than the former unit and can run the entire building. It is a propane generator which used an in-ground tank that ran the former unit which was much smaller. If the PD needs to run the entire building on this tank, the fuel is quickly consumed. The conversion will allow the PD to use primarily natural gas (which is cheaper than propane) and use the

An Equal Opportunity Employer

*This material is available in alternative formats for persons with disabilities. To request an accommodation, please call 802.863.9094 (voice) or 802.863.0450 (TTY).*

propane tank as a fallback. The cost for this conversion is \$10,425 and will be performed by Brookfield which services the generator. The quote for this work is attached.

At this time we would like to request that the Board of Finance authorize us to execute a contract for \$41,170 with Climate Systems for the mechanical systems upgrades and hot water heater replacement and a contract for \$10,425 with Brookfield to convert the emergency generator to a dual fuel system as described above and attached.



**Climate Systems Inc.**

Heating - Ventilating - Air Conditioning - Refrigeration

January 18, 2011

Burlington Police Department  
Attn: **Walter Decker**  
1 North Avenue  
Burlington, VT 05401

**Re: Installation of a Mitsubishi Ductless AC System for the Fitness Room**

Dear Walter:

We are pleased to provide you with this proposal for the installation of a new air conditioning system to serve the existing fitness training room. This system is designed to operate in conjunction with the existing HVAC to properly provide air changes and filtration for the room. The system will be able to cool the room without creating uncomfortable conditions in the adjoining areas.

Our approach to this project is to provide you with an efficient, reliable and maintainable system.

**Our scope of work includes the following:**

- Furnish and install (1) Mitsubishi (MSYD36NA) indoor air handler on the upper wall of the training room.
- Furnish and install (1) Mitsubishi (MUYD36NA) on a prefabricated pad on the roof.
- Furnish and install all refrigeration piping and insulation from the indoor unit to the outdoor unit.
- Furnish and install (1) condensate pump and all condensate piping to an existing drain line.
- Start up, test and adjust according to manufactures specifications, for optimal efficiency and operation.

**P.O. Box 914, Williston, VT 05495 Tel: (802) 660-9969**  
**www.climatesystems.com**

- Warranty for a period of one year after completion of installation. System carries an additional manufacturer's five-year warranty on the compressor which excludes labor, other materials and freight charges.

**Estimated cost: \$6,720.00**

**Six thousand seven hundred and twenty dollars**

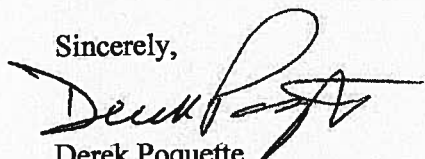
**Sales tax is excluded**

**Assumptions & Notes:**

- Normal business hours 7:00 A.M. to 4:30 P.M.
- Please Note: The costs of crane services and mechanical permits are included.
- Please Note: All electrical supply and roofing are excluded from this proposal. The city has coordinated the electrical work on previous projects.
- Please Note: The costs of any permits for planning and zoning process are excluded.
- This proposal is valid for 45 days.

We thank you for soliciting this proposal. The equipment lead-time is 1-2 weeks at this time. Please do not hesitate to call me at 660-9969, anytime, if you have any questions or comments.

Sincerely,



Derek Poquette

Project Manager

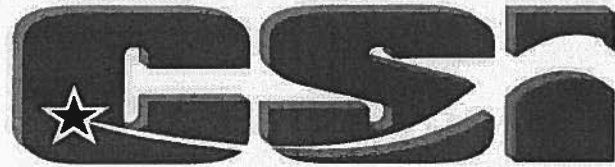
[dpoquette@climatesystems.com](mailto:dpoquette@climatesystems.com)

**Acceptance**

If you accept this proposal and our payment terms below please sign and mail a copy to my attention. Our payment terms are 50% billable upon acceptance and 50% billable upon completion. Net 30 days.

Customer authorized signature: \_\_\_\_\_

Date: \_\_\_\_\_



## **Climate Systems Inc.**

Heating - Ventilating - Air Conditioning - Refrigeration

January 14, 2011

Burlington Police Department  
Attn: **Walter Decker**  
1 North Avenue  
Burlington, VT 05401

**Re: Replacement of RTU#5 serving Lock up and Evidence storage areas**

Dear Walter:

We are pleased to provide you with this proposal for the planned replacement of the York Roof Top HVAC Unit #5, which serves the lock up and evidence storage areas. The existing system is in poor condition due to old age. This new system should qualify for an efficiency rebate from Burlington Electric in the amount of \$520.00, which will be mailed to you following installation and payment.

Our approach to this project is to provide you with an efficient, reliable and maintainable system.

**Our scope of work includes the following:**

- Disconnect, recover and properly dispose of the existing York system as per EPA standards.
- Furnish and install (1) York (XJ037N07P2EAA5) 3-ton Ultra Efficiency rooftop packaged heating and cooling system in the same location. This unit includes high static motor, economizer, barometric relief damper, supply smoke detector and two stage controls.
- Furnish and install (1) new digital programmable thermostat in the same location as the existing mercury thermostat.
- Furnish and install (1) Cambridgeport curb adapter for the new unit.
- Furnish and install (1) Dual enthalpy controller.



- Reconnect to the existing control wiring and natural gas piping on the roof.
- Furnish and install (1) condensate drain.
- Start up, test and adjust according to manufactures specifications, for optimal efficiency and operation.
- Warranty for a period of one year after completion of installation. System carries an additional manufacturer's four-year warranty on the compressor and an additional nine-year warranty on the heat exchanger which excludes labor, other materials and freight charges.

**Estimated cost: \$9,850.00**

**Nine thousand eight hundred and fifty dollars**

**Sales tax is excluded**

**Assumptions & Notes:**

- Normal business hours 7:00 A.M. to 4:30 P.M.
- **Please Note:** The costs of crane services and mechanical permits are included.
- **Please Note:** All electrical supply and any new control wiring are excluded from this proposal. The city has coordinated the electrical work on previous projects.
- This proposal is valid for 45 days.

We thank you for soliciting this proposal. The equipment lead-time is 4-6 weeks at this time. Please do not hesitate to call me at 660-9969, anytime, if you have any questions or comments.

Sincerely,

  
Derek Poquette  
Project Manager

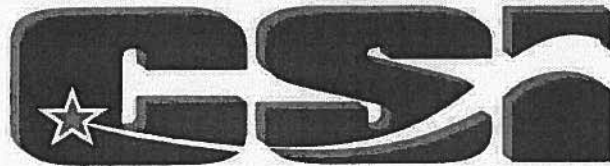
[dpoquette@climatesystems.com](mailto:dpoquette@climatesystems.com)

**Acceptance**

If you accept this proposal and our payment terms below please sign and mail a copy to my attention. Our payment terms are 50% billable upon acceptance and 50% billable upon completion. Net 30 days.

Customer authorized signature: \_\_\_\_\_

Date: \_\_\_\_\_



## **Climate Systems Inc.**

Heating - Ventilating - Air Conditioning - Refrigeration

January 14, 2011

Burlington Police Department  
Attn: **Walter Decker**  
1 North Avenue  
Burlington, VT 05401

**Re: Replacement of RTU#3 serving Administration Area**

Dear Walter:

We are pleased to provide you with this proposal for the planned replacement of the York Roof Top HVAC Unit #3 which serves the Administration area. At this time, the system is in poor condition. This system should qualify for an efficiency rebate in the amount of \$1,250.00 paid to you from Burlington Electric upon completion of the project.

Our approach to this project is to provide you with an efficient, reliable and maintainable system.

**Our scope of work includes the following:**

- Disconnect, recover and properly dispose of the existing York system as per EPA standards.
- Furnish and install (1) York (YORZJ150N20P2EAA5) 12.5-ton Ultra Efficiency rooftop packaged heating and cooling system in the same location. This unit includes high static motor, economizer, barometric relief damper and supply smoke detector.
- Furnish and install (1) Cambridgeport curb adapter.
- Furnish and install (1) Dual enthalpy controller.
- Reconnect to the existing control wiring and natural gas piping on the roof.
- Start up, test and adjust according to manufactures specifications, for optimal efficiency and operation.

- Warranty for a period of one year after completion of installation. System carries an additional manufacturer's four-year warranty on the compressor and an additional nine-year warranty on the heat exchanger which excludes labor, other materials and freight charges.

**Estimated cost: \$14,900.00**

**Fourteen thousand nine hundred dollars**

**Sales tax is excluded**

**Assumptions & Notes:**

- Normal business hours 7:00 A.M. to 4:30 P.M.
- **Please Note:** The cost of crane services and mechanical permits is included.
- **Please Note:** All electrical supply is excluded from this proposal. The city has coordinated the electrical work on previous projects.
- This proposal is valid for 45 days.

We thank you for soliciting this proposal. The equipment lead-time is 4-6 weeks at this time. Please do not hesitate to call me at 660-9969, anytime, if you have any questions or comments.

Sincerely,



Derek Poquette  
Project Manager  
[dpoquette@climatesystems.com](mailto:dpoquette@climatesystems.com)

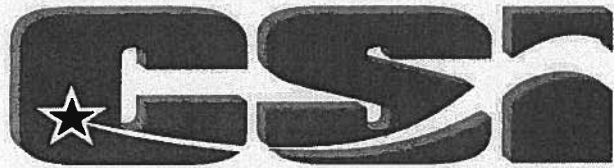
**Acceptance**

If you accept this proposal and our payment terms below please sign and mail a copy to my attention. Our payment terms are 50% billable upon acceptance and 50% billable upon completion. Net 30 days.

Customer authorized signature: \_\_\_\_\_

Date: \_\_\_\_\_





## **Climate Systems Inc.**

Heating - Ventilating - Air Conditioning - Refrigeration

February 1, 2011

Burlington Police Department  
Attn: **Walter Decker**  
1 North Ave.  
Burlington, VT 05401

Re: **Installation of (1) Bradford White Energy Saver Hot Water Heater**

Dear Walter:

We are pleased to provide you with this proposal to replace the existing Gas Hot Water Heater serving the building. The existing heater is over 15 years old and does not have a thermostatic mixing valve per code.

Our scope of work includes the following:

- Isolate, drain, disconnect and dispose of the existing hot water heater.
- Furnish and install (1) Bradford White (D80T1993N) 80 gallon commercial gas hot water heater.
- Furnish and install (1) Taco (008-SF) bronze circulator pump to recirculate domestic hot water.
- Furnish and install (1) Lead Free thermostatic mixing valve per code.
- Furnish and install (1) domestic hot water expansion tank.
- Reconnect to the existing electrical, venting, gas supply and water supply piping.
- Start up, test and adjust according to manufacturers specifications, for optimal efficiency and operation.
- Warranty for a period of one year after the completion of the installation. The heater has an additional three year limited manufacturer warranty.

**Estimated cost: \$9,700.00**

**Nine thousand seven hundred dollars**


**Sales tax is excluded**

**Assumptions & Notes:**

- Normal business hours 7:00 A.M. to 4:30 P.M.
- Please Note: The hot water supply will be interrupted during the day of the project.

We thank you for soliciting this proposal. There is a 7-10 lead time for this heater at this time. Please not hesitate to call me at 660-9969, anytime, if you have any questions or comments.

Sincerely,

  
Derek Poquette  
Project Manager  
[dpoquette@climatesystems.com](mailto:dpoquette@climatesystems.com)

**Acceptance**

If you accept this proposal and our payment terms below please sign and mail or fax a copy to my attention (863-0323). Our payment terms are 50% billable upon acceptance and 50% billable upon completion. Net 30 days.

Customer authorized signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Commercial Energy Saver Gas Electronic Ignition

### Features:



Bradford White is ISO registered to the 9001 standard.

- **Non-CFC foam insulation.**
- **Vitraglas® lined tank**—Bradford White water heater tanks are protected from the corrosive effects of hot water by an exclusive ceramic porcelain-like coating. The Bradford White high silica Vitraglas® lining provides a tough interior surface for water heater tanks, which must withstand the wearing effects of high volume and high temperature hot water.
- **Factory installed Hydrojet® Sediment Reduction System**—cold inlet sediment reduction device made of stainless steel for increased durability. Helps prevent sediment build up in tank.
- **Flue damper**—automatic flue damper reduces stand-by loss, saving money and fuel.
- **Electronic ignition**—pilot does not burn while water heater is in standby mode. (115V AC required to heater). Ignition system operates off of 24 volts.
- **Magnesium anode rods**—employed to provide an extra measure of corrosion prevention for longer life.
- **Hand hole cleanout**—allows inspection of tank interior and facilitates removal of water heater's principal deterrent to long life—accumulated lime and sediment deposits.
- **Controls**—adjustable electronic thermostat to any temperature up to 180°F (82°C). A recycling Energy Cut-Off (E.C.O.) shuts off all gas in event of an overheat condition.
- **NSF construction available.**
- **Brass drain valve.**
- **T&P relief valve installed.**
- **ASME code available** on all models above 200,000 BTUH (58.6KW).
- **Three year limited warranty**—protects your investment in a quality glass lined water heater. If the tank leaks for reasons of faulty materials, workmanship, or corrosion within the warranty period, the water heater will be replaced with a comparable water heater of our manufacture. (Exclusive of all shipping and reinstallation costs.) See complete copy of the warranty included with the water heater.
- **One year limited parts warranty**—these quality components are manufactured for us by industry leaders and will be replaced in the event of failure during the parts warranty period (exclusive of shipping and reinstallation costs.)
- **Design certified by CSA International (formerly AGA/CGA).**
- **North Carolina Code Compliant.**

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 7,063,133 B2; 5,954,492; 5,954,492; 5,781,379; 5,943,984; 5,081,698; 5,988,117; 6,142,216; 5,199,385; 5,574,822; 5,372,185; 5,485,879; 5,277,171; (B1)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,893; 4,669,448; 4,829,983; 4,808,358; 5,115,767; 5,092,519; 5,052,346; 4,416,222; 4,628,184; 4,861,968; 4,672,919; Re. 34,534. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,515; 2,108,186; 2,107,012; 2,092,105.5.



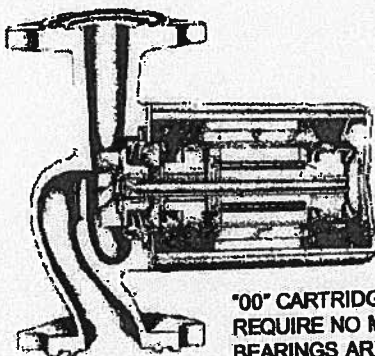


## Model "00" Cut-Away

EXCLUSIVE DIRT BARRIER.  
KEEPS DIRTY SYSTEM WATER  
OUT OF THE BEARING CHAMBER.

UNIVERSAL FLANGE-TO-FLANGE  
DIMENSIONS.  
IDEAL FOR RETROFITS.

UL & CSA LISTED  
CIRCULATOR. MOTOR IS  
IMPEDANCE PROTECTED.



EXCLUSIVE REPLACEABLE  
CARTRIDGE DESIGN.  
REPLACING THE CARTRIDGE  
REBUILDS THE CIRCULATOR.

CERAMIC SHAFT FOR LONGER  
LIFE AND EXCELLENT WEAR  
RESISTANCE.

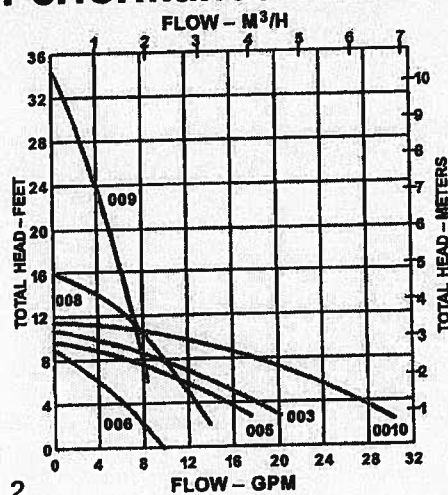
"00" CARTRIDGE CIRCULATORS  
REQUIRE NO MAINTENANCE.  
BEARINGS ARE SELF-LUBRICATING.

## Applications

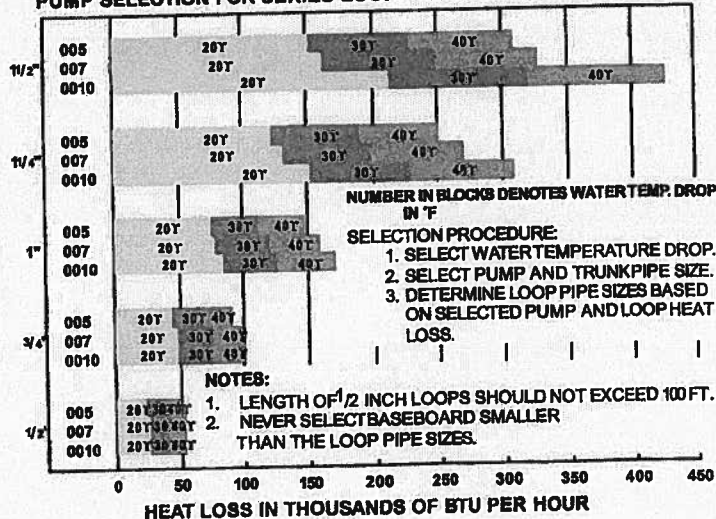
Model No.	Capacities	Applications
IRON	005-F 9 1/2" to 18 GPM	Hydronic heating systems up to 150,000 BTU's.* Other applications in zoning with circulators, add a zone additions, and closed loop solar systems.
	007-F 11" to 20 GPM	Typical hydronic heating systems up to 185,000 BTU's.* Other applications in zoning with circulators, add a zone additions, and closed loop solar systems.
	008-F 16" to 14 GPM	Hydronic heating systems requiring higher heads. Other applications in radiant in floor/panel hydronic heating systems, and closed loop solar systems.
	009-F 34" to 8 GPM	High head low flow hydronic heating systems. Other applications in higher head radiant in floor/panel hydronic heating systems, and closed loop solar systems.
	0010-F 11 1/2" to 30 GPM	Large residential light commercial hydronic heating systems to 215 000 BTU's.* The High Velocity 0010 should be used when that additional performance is required.
BRONZE	005-BF 9 1/2" to 18 GPM	Domestic hot water recirculation.
	006-B 10" to 10 GPM	Heat recovery systems, typical domestic hot water recirculation, water source heat pumps, and open loop solar systems. Available in sweat or threaded connections.
	007-BF 11" to 20 GPM	Domestic hot water recirculation.
	008-BF 16" to 14 GPM	Higher head heat recovery systems, large domestic hot water recirculation systems, water source heat pumps and open loop solar systems.
	008-BF 34" to 8 GPM	High head low flow open loop solar systems, and high head domestic hot water recirculation systems.
	0010-BF 11 1/2" to 30 GPM	Higher flow domestic hot water recirculation systems.

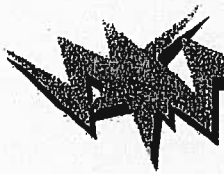
\*At 20°F water temperature drop, depending on pipe sizes.

## Performance Field



## PUMP SELECTION FOR SERIES LOOP - HOT WATER HEATING SYSTEM





# Brook Field Service

**Providing Shelter from the Storm**

---

P.O. Box 47 • Northfield, VT 05663 TOLL-FREE: 866-769-3797 • (802) 485-6567 • FAX: (802) 485-6690  
E-mail: bfgsenpwr@tds.net

Walt Decker  
Deputy Chief of Police  
Burlington PD

Dear Walt,

October 28, 2010

Below is a recap of the revised quote to both convert the generator to a dual fuel system and repipe the natural gas feeds for the unit and building appliances:

**Price Includes:**

- Parts
- 2 day rental of towable generator
- Labor (2 full days)
- Travel ( 200 miles)
- Subcontract welding and piping system
- Coordinate with VT Natural Gas for new meter

Quoted Price: \$5,430.00

Note: VT Natrual Gas advises a two week lead time for meter.

If you should have any questions or concerns, please call at your earliest convenience.

Best Regards,



Jim Brochhausen

Industrial Engines and Generators • Transfer Switches • Load Bank Testing  
Generator Rentals • Vermont Generator Inspections



# Brook Field Service

**Providing Shelter from the Storm**

---

P.O. Box 47 • Northfield, VT 05663 TOLL-FREE: 866-769-3797 • (802) 485-6567 • FAX: (802) 485-6690  
E-mail: bfsgenpwr@tds.net

January 17, 2011

Burlington Police Department  
Walt Decker, Deputy Chief of Police  
1 North Avenue  
Burlington, VT 05401

Dear Walt,

Below is a recap of the revised quote to both convert the generator to a dual fuel system and repipe the natural gas feeds for the unit and building appliances. This revision is due to VT Gas changing the scope of work requiring (2) new regulators to be installed for the building and generator.

Price includes:

- Parts
- Labor (2 Full Days)
- Travel (200 Miles)
- Sub-contract Welding and Piping System
- Coordinate With VT Natural Gas For New Meter

Quoted Price: **\$10,425.00**

Note: VT Natural Gas advises a two-week lead time for meter.

If you should have any questions or concerns, please call at your earliest convenience.

Best Regards



Jim Bröchhausen

---

Industrial Engines and Generators • Transfer Switches • Load Bank Testing  
Generator Rentals • Vermont Generator Inspections